

Figure 1:

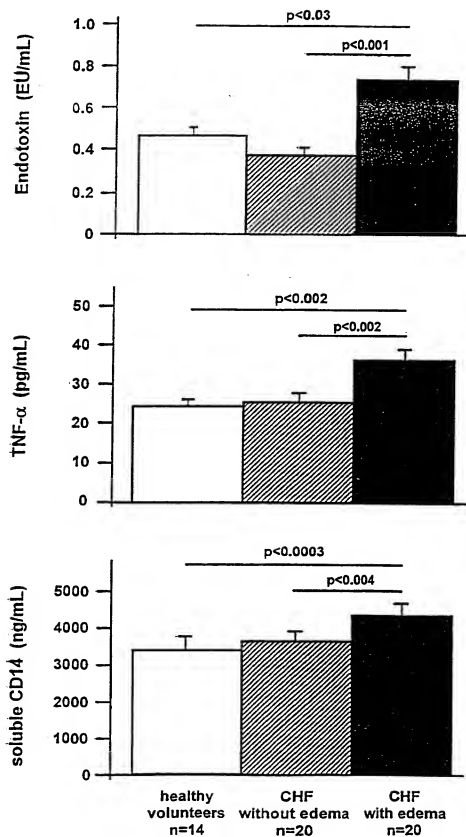
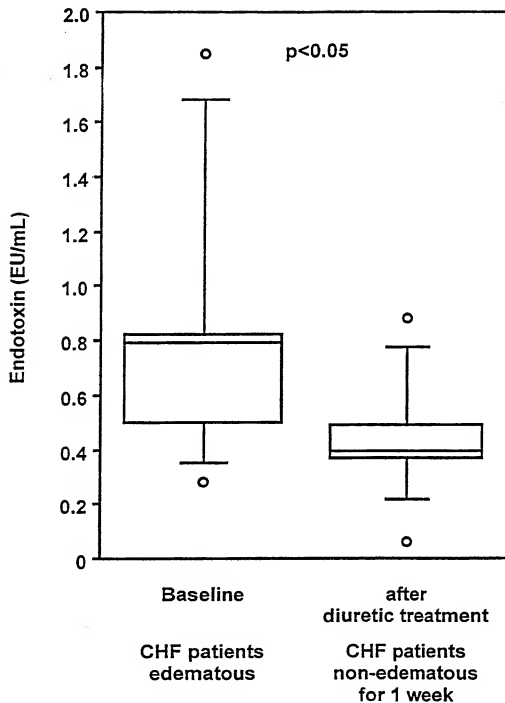
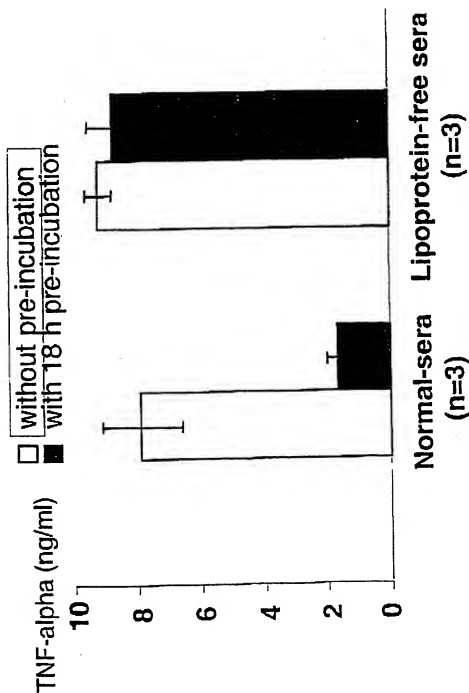


Figure 2:





**Figure 3: Lipoprotein-free serum lacks LPS-neutralizing activity**

Sera were incubated with 3 ng/ml LPS and added to human monocytes directly or after a 18 h pre-incubation time

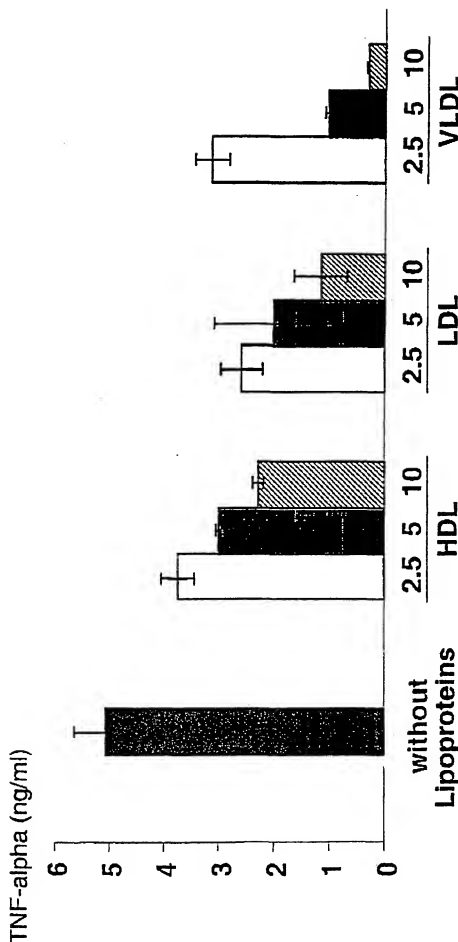


Figure 4: Lipoproteins including HDL, LDL and VLDL inhibit LPS-induced TNF-release of monocytes. The effects of LDL and VLDL are even stronger than that of HDL. In all experiments: n=3

Lipoproteins were added to Lipoprotein-free Serum (5 %) and incubated for 17 h with 3 ng/ml LPS before addition to monocytes

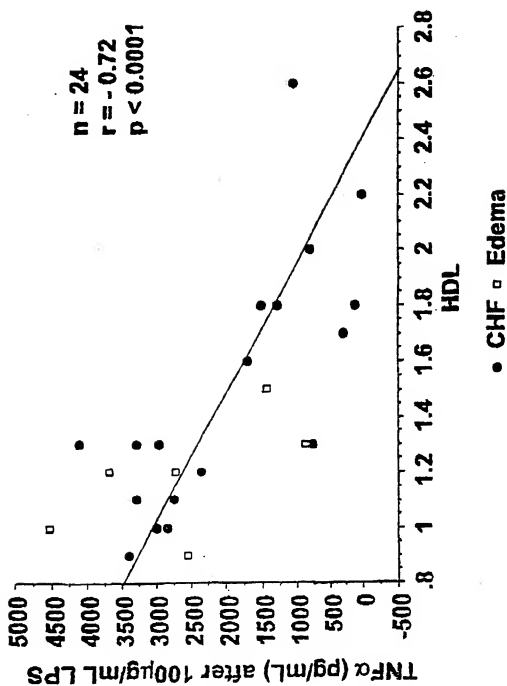


Figure 5: Whole Blood Analysis

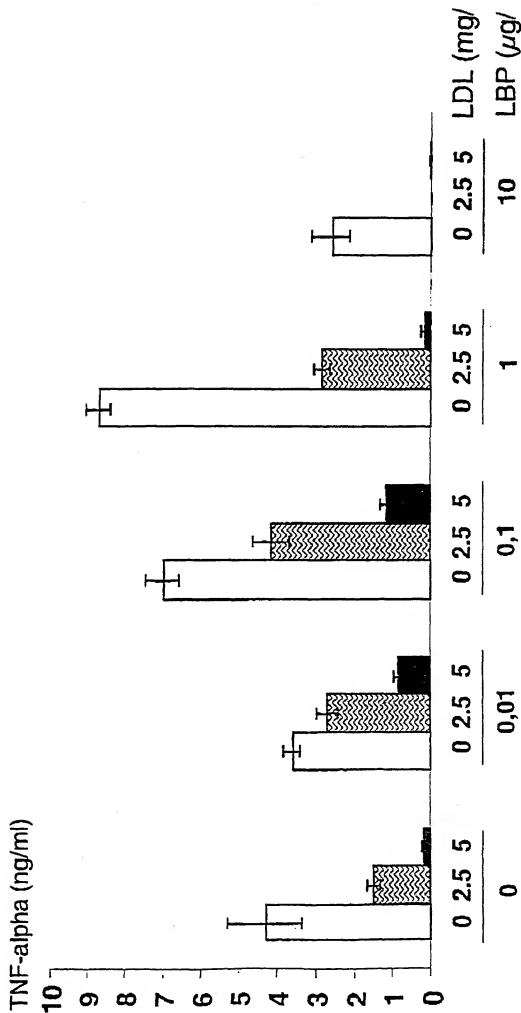


Figure 6: In the presence of elevated LBP-concentrations lipoproteins show enhanced LPS-neutralization capacity. In all experiments: n=3.

LBP and LDL were pre-incubated for 17 h before cell stimulation with 3 ng/ml LPS

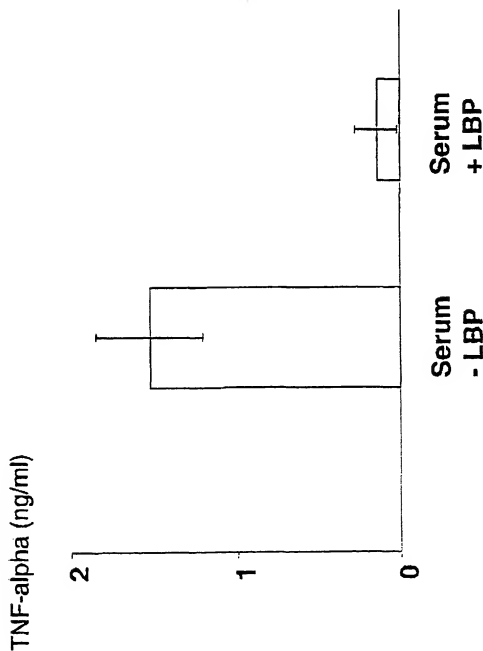


Figure 7: Addition of LBP to lipoprotein containing serum reduces LPS-mediated TNF production (n=3).

Normal serum +/- 10 µg/ml LBP was incubated with 3 ng/ml LPS for 16 h, and then added to monocytes

Figure 8: LPS - Neutralisation by UDCA in whole blood of 4 healthy subjects

Measurements by Immulite	Control D		Control J		Control Ch		Control F	
	TNF	IL6	TNF $\alpha$	IL6	TNF $\alpha$	IL6	TNF $\alpha$	IL6
pg/ml		pg/ml		pg/ml		pg/ml		
Control, blood alone (Con) Con + 50 $\mu\text{g/ml}$ LPS Con + BPI (1 $\mu\text{g/ml}$ )	6.7	<5	4.6	<5	14	8	15.4	<5
	294	301	456	380	486	300	589	487
	<4	<5	6.9	<5	6.9	<5	8	<5
Blood with UDCA 1 $\text{mg/ml}$ ( 1% ethanol) + LPS + UDCA + LPS + Ethanol 1% (no UDCA)	4.8	<5	6	6.5	<4	8.5	<4	<5
	<4	5.6	<4	<5	6.4	9.1	<4	<5
	126	119	315	286	407	318	430	408
Blood with UDCA 100 $\mu\text{g/ml}$ (0.1% ethanol) + LPS + UDCA + LPS + Ethanol 0.1% (no UDCA)	10.6	<5	14	<5	42.7	46.3	16	<5
	114	114	41.3	20.4	49.6	306	397	419
	265	230	221	263	599	375	569	414
Blood with UDCA 10 $\mu\text{g/ml}$ (0.01% ethanol) + LPS	8.5	<5	8.3	<5	13.7	9	12.3	<5
	279	248	432	358	617	400	600	499



Figure 9: LPS - Neutralisation by UDCA in whole blood in patient 1

Measurements by Immulite	P1 / -1			P1 / 0			P1 / 1			P1 / 2			P1 / 5		
	TNF	IL6	pg/ml	TNF $\alpha$	IL6	pg/ml	TNF $\alpha$	IL6	pg/ml	TNF $\alpha$	IL6	pg/ml	TNF $\alpha$	IL6	pg/ml
Control, blood alone (Con) Con + 50 pg/ml LPS Con + BP1 (1 $\mu$ g/ml)	28.7	11.2		70.2	35.2										
	878	573		938	723										
	29.7	< 5		15.1	< 5										
Blood with UDCA 1 mg/ml ( 1% ethanol) + LPS + UDCA + LPS + Ethanol 1% (no UDCA)	< 4	12.8		10.	9.8										
	< 4	10.7		6.4	6.0										
				648	278										
Blood with UDCA 100 $\mu$ g/ml (0.1% ethanol) + LPS + UDCA + LPS + Ethanol 0.1% (no UDCA)	8.5	7.8		24.5	19.7										
	813	153		692	773										
				886	580										
Blood with UDCA 10 $\mu$ g/ml (0.01% ethanol) + LPS	38.0	11.4		93.0	45.7										
	952	597		1013	853										
Plasma levels				9.1	26.7		8.3	28.8	< 4	20.5	5.8	28.1			

SUBSTITUTE SHEET (RULE 26)

Figure 11: LPS - Neutralisation by UDCA in whole blood in patient 3

Measurements by Immulite	P3 / -1			P3 / 0		
	TNF $\alpha$	IL6	pg/ml	TNF $\alpha$	IL6	pg/ml
Control, blood alone (Con)	43.1	7.9	52.1	52.1	12.9	12.9
Con + 50 $\mu$ g/ml LPS	450	378	490	490	346	346
Con + BPI (1 $\mu$ g/ml)	16.4	< 5	10.0	10.0	< 5	< 5
Blood with UDCA 1 $\mu$ g/ml (1% ethanol) + LPS + UDCA + LPS + Ethanol 1% (no UDCA)	6.5	10.4	< 4	< 4	9.1	9.1
	< 4	10.3	< 4	< 4	10.7	10.7
	208	108	288	288	169	169
Blood with UDCA 100 $\mu$ g/ml (0.1% ethanol) + LPS + UDCA + LPS + Ethanol 0.1% (no UDCA)	12.1	9.4	21.7	21.7	8.4	8.4
	48.0	63.5	241	241	382	382
	383	285	448	448	346	346
Blood with UDCA 10 $\mu$ g/ml (0.01% ethanol) + LPS	34.7	8.0	39.4	39.4	10.7	10.7
	375	310	468	468	366	366
Plasma level	13.0	17.1	10.2	10.2	15.9	15.9

Figure 12: LPS - Neutralisation by UDCA in whole blood in patient 4

Measurements by Immulite	P4 / -1		P4 / 0		P4 / 1		P4 / 2	
	TNF $\alpha$	IL6	TNF $\alpha$	IL6	TNF $\alpha$	IL6	TNF $\alpha$	IL6
	pg/ml		pg/ml		pg/ml		pg/ml	
Control, blood alone (Con)	34.5	10.4	29.5	10.2	4.7	< 5	4.0	< 5
Con + 50 pg/ml LPS	224	98.4	172.0	77.5	156	88.9	100	46.8
Con + BPI (1 $\mu$ g/ml)	18.1	< 5	33.5	7.1	< 4	< 5	< 4	< 5
Blood with UDCA 1 mg/ml ( 1% ethanol) + LPS + UDCA + LPS + Ethanol 1% (no UDCA)	< 4	8.2	< 4	8.2	< 4	< 5	< 4	8.8
	< 4	6.6	< 4	9.5	< 4	5.6	< 4	6.3
	132	48.0	98.5	68.4	66.9	35.6	49.5	26.5
Blood with UDCA 100 $\mu$ g/ml (0.1% ethanol) + LPS + UDCA + LPS + Ethanol 0.1% (no UDCA)	83.7	49.6	44.5	60.0	4.2	< 5	< 4	< 5
	242	257	55.8	61.0	89.7	36.6	39.9	34.6
	154	130	136.0	159	141	82.7	120	81.0
Blood with UDCA 10 $\mu$ g/ml (0.01% ethanol) + LPS	42.3	13.6	174	72.0	10.9	< 5	5.2	< 5
	188	80.2	278	166	163	88.7	95.6	53.4
Plasma levels	8.1	< 5	< 4	< 5	< 4	< 5	4.7	< 5